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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/809,068	03/16/2001	Shigeru Hayakawa	000400-819	4710

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EXAMINER

HO, THOMAS Y

ART UNIT

PAPER NUMBER

3677

DATE MAILED: 07/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/809,068

Applicant(s)

HAYAKAWA ET AL.

Examiner

Thomas Y Ho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 17-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 17-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 April 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

(I) Claims 1-15, 17-20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jahrsetz USPN5802894 in view of Konchan USPN5348357.

As to claims 1-15, 17-20, and 22 Jahrsetz discloses:

- A latch mechanism 7 adapted to a vehicle door and latching the vehicle door to a vehicle body; an open link 15 engageable and disengageable with the latch mechanism; a swing lever 17 connected to the open link (the swing lever 17 is connected to the open link by way of pin 18); an inside lever 28 positioned parallel to the open link and movable into and out of engagement with the open link (the inside lever is movable into and out of engagement with the open link owing to the pin 18 that is moved by the slot 29 that is on the inside lever 28); an electric driving source 30 having a gear member 22; a rotary gear member 19 arranged between the swing lever 17 and the electric driving source 30 to be meshed with the gear member of the electric driving source, the rotary gear member being directly and engagably connected to the swing lever.
- The open link 15 is arranged in a same plane as the swing lever 17 (the open link and the swing lever must have co-planar relationship between abutment 16 and pin 17).

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- A housing accommodating the open link 15, the swing lever 17, the electric driving source 30 and the rotary gear member 19 so that the swing lever and the rotary gear member are rotatably supported in the housing.
- An opening lever 9 perpendicularly arranged relative to the open link 15.
- A concave portion 19 (Figure 2, rightmost 19) formed in the swing lever 17; and a pin formed in the rotary gear member 19 and extending into the concave portion so that the pin engages the concave portion by the rotation of the rotary gear member.
- The housing 2a comprises a plurality of concave portions (right side of the housing 2a), the swing lever 17 including a projection 20 (round portion around pin 18) selectively engageable with the concave portions. As shown in Figure 1, the projection 20 on the swing lever 17 is not in engagement with the concave portions of the housing, but as shown in Figure 2, the projection on the swing lever is selectively engaged with the concave portions (direct attention to portion near 18 in Figure 2) at the lower concave region of the two concave regions defining the concave portions on housing 2a.
- A rotatable latch 7 including a latch groove; a rotatable pawl 8 adapted to contact the latch to prevent rotation of the latch, including a unitarily rotatable element 14 that rotates unitarily with the pawl 8; an open link 15 adapted to contact the unitarily rotatable element 14 to rotate the unitarily rotatable element and the pawl so the pawl is moved out of contact with the latch; an inside lever 28 adapted to be operated through operation of a door handle 9 so that the inside lever moves into engagement (by pin 18 in slot 29) with the open link (at abutment 16) upon operation of the door

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handle to move the open link and moves out of engagement with the open link (by some undisclosed mechanism).

- The unitarily rotatable element 14 includes a lifting lever (any portion of 14) mounted on a shaft (lower portion of 14) that is integrally formed with a main body of the pawl.
- The lifting lever 14 includes an engaging portion (portion of 14 in contact with portion of 15) contacted by an engaging portion of the open link 15.
- The open link 15 is shiftable between an unlocked position and a locked position (col.8, ln.25-35), the open link being engageable and disengageable with the latch mechanism 7 when the open link is in the unlocked position (Figure 1), the open link being unable to engage the latch mechanism when the open link is in the locked position (Figure 2). The open link 15 is displaceable between two FUNCTIONAL POSITIONS that meet the claimed limitations.

Konchan discloses the following:

- An inside lever 120 movable into and out of engagement with the open link 100 (col.3, ln.65-69; col.4, ln.9-49).
- An inside lever 120 adapted to be operated through operation of a door handle 150 so that the inside lever moves into engagement with the open link 100 (through intermediary levers) upon operation of the door handle to move the open link and moves out of engagement with the open link upon release of the door handle (due to the spring 134).

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In Jahrsetz, the inside lever 28 is movable into engagement with the open link 15, because the surfaces of the slot 29 on inside lever 28 are mounted with a pin 18, and when the inside lever 28 is pivoted clockwise in Figure 1, the slot 29 pulls the pin 18 towards the left, and so the pin 29 and slot 18 together engage the open link 15 at abutment 16. Jahrsetz never explicitly shows or states that the inside lever 28 is movable OUT of engagement with the open link 15. However, Figure 1 of Jahrsetz clearly shows that a starting or resting position of the inside lever 28 keeps the inside lever 28 and pin 18 out of engagement with the open link, and engagement ONLY occurs when the lever 9 is moved in the direction of 9a in Figure 1. But, like in most automobile latches, normal use of the latch will always return the assembly to the position shown in Figure 1. Though the mechanism returning the inside lever 28 to the position shown in Figure 1 (as opposed to engaged position with 18 pushing 16 leftward in Figure 1), it is inherent that such a movement must occur for Jahrsetz to function, and thus the inside lever 28 is movable out of engagement with the open link 15. Further evidence is provided by the secondary reference of Konchan, which is detailed below.

Konchan discloses an inside lever 120 that is biased by a torsion spring 134 to a rest position. This means that the inside lever 120 can engage the open link, or is movable into engagement with the open link, and because of the bias of the torsion spring, is movable to rest position, or out of engagement with the open link. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the inside lever disclosed by Jahrsetz to be biased for movement out of engagement with the open link, as explicitly taught by Konchan, to return the lever to rest position.

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(II) Claims 18, 21, and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jahrsetz USPN5802894 in view of Konchan USPN5348357, utilizing an ALTERNATIVE interpretation of the Jahrsetz reference different than the one provided in paragraph (I) above.

As to claims 18, 21, and 23-24, Jahrsetz discloses:

- A rotatable latch 7 including a latch groove for receiving a striker of a vehicle body; a rotatable pawl 8 adapted to contact the latch to prevent rotation of the latch, including a unitarily rotatable element 15 that rotates unitarily with the pawl; an open link 17 adapted to contact the unitarily rotatable element to rotate the unitarily rotatable element and the pawl so that the pawl is moved out of contact with the latch; a swing lever 19 (Figure 1) connected to the open link; an inside lever 9 adapted to be operated through operation of a door handle so that the inside lever moves into engagement with the open link 17 (9 engages 17 through levers 26/28) upon operation of the door handle to move the open link and moves out of engagement with the open link upon release of the door handle; an electric driving source 30 having a gear member 22; a rotary gear member 21 arranged between the swing lever 19 and the electric driving source and in meshing engagement with the gear member of the electric driving source, the rotary gear member being directly connected to the swing lever.
- A movable inside lever 9 adapted to be operatively connected to a door handle to move in response to operation of the door handle; the inside lever having a part engageable (9 engages open link 17 by way of levers 26/28 engaging pin 18 on open link 17) with an engaging portion 18 of the open link 17 when the open link is in the

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unlocked position (Figure 1) so that movement of the inside lever resulting from operation of the door handle causes the open link to move into contact with the unitarily rotatable element 15.

- The rotary gear member being directly connected to the swing lever, with operation of the rotary gear member moving the swing lever to shift the open link 17 between the unlocked and locked positions (col.8, ln.15-39).
- The open link 17 is shiftable between an unlocked position (Figure 1) and a locked position (Figure 2), the open link being adapted to contact the unitarily rotatable element 15 to rotate the unitarily rotatable element and the pawl 8 so that the pawl is moved out of contact with the latch 7 when the open link is in the unlocked position, the open link being unable to contact the unitarily rotatable element when the open link is in the locked position.

Konchan discloses:

- The inside lever 120 moves out of engagement with the open link 100 upon release of the door handle (due to biasing by spring 134).

For a detailed explanation of the combination rejection of Jahrsetz in view of Kochan, refer to paragraph (I) above.

Response to Arguments

Applicant's arguments filed 4/19/03 have been fully considered but they are not persuasive.

In response to applicant's arguments that Jahrsetz USPN5802894 fails to show all of the features claimed (pg.4-6), a new rejection has been made under 35 USC 103(a) of Jahrsetz in

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view of Konchan USPN5348357. The new rejection is not an admission that Jahrsets fails to show all of the claimed limitations. The applicant is directed to Figures 1-2 of Jahrsetz. The inside lever 28 has a part 29 (a slot) movable INTO engagement (upon clockwise rotation of 26/28) with the open link 15 because the slot 29 is also engages a pin 18 that contacts the open link 15. Inside lever 28 engages the pin 18 that in turn engages the open link 15, but nevertheless, the inside lever 28 does in fact “engage” the open link 15 through pin 18. Jahrsetz never explicitly discloses that the inside lever 28 is movable OUT OF engagement (counterclockwise rotation of 26/28 from the actuated position back to the rest positions of 26/28 shown in Figures 1-2), but the examiner contends that it is inherent to the mechanism that the inside lever 28 must somehow return to the rest position shown in Figures 1-2 by way of an undisclosed mechanism after being rotated clockwise by 9. As shown in Figures 1-2, the inside lever 28 and the pin 18 are both out of engagement with the open link 15, and any movement of the inside lever 28 to the rest position must be considered to be moving OUT OF engagement with the open link 15. Because it could be argued that Jahrsetz does not explicitly disclose the movement of the inside lever from actuated position (rotated clockwise) back to rest position (Figures 1-2), Konchan has been used to modify Jahrsetz to have a return spring as detailed in the action. There is clear motivation for the use of Konchan, and furthermore, the spring is used on analogous parts between the two references.

In response to applicant’s arguments concerning new claims 22-24 that Jahrsetz does not disclose that the open link is shiftable between unlocked and locked positions, with the open link being engageable and disengageable with the latch mechanism when the open link is in the unlocked position and with the open link being unable to engage the latch mechanism when the

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open link is in the locked position, an alternative rejection using Jahrsetz has been made, with alternate interpretations of the disclosed structure of Jahrsetz used to read on the claimed limitations.

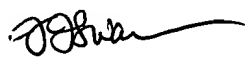
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Y Ho whose telephone number is (703)305-4556. The examiner can normally be reached on M-F 10:00AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J Swann can be reached on (703)306-4115. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9326 for regular communications and (703)872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-1113.

TYH
July 17, 2003


J. J. SWANN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600